

**MARKING OF ARMY AIRFIELD-HELIPORT
OPERATIONAL AND MAINTENANCE FACILITIES**

		Paragraph	Page
CHAPTER	1. GENERAL		
	Purpose	1-1	1-1
	Scope	1-2	1-1
	Exceptions.....	1-3	1-1
	Definitions	1-4	1-1
CHAPTER	2. MARKING OF SERVICEABLE RUNWAYS AND TAXIWAYS AT AIRFIELDS		
	General	2-1	2-1
	Marking with paint	2-2	2-1
	Application.....	2-3	2-1
	Marking practices.....	2-4	2-5
	Runway markings.....	2-5	2-5
	Taxiway markings	2-6	2-8
	Stabilized areas.....	2-7	2-14
	Runway shoulder marking.....	2-8	2-14
	Aircraft parking ramps, tie down and mooring areas	2-9	2-14
CHAPTER	3. MARKING OF SERVICEABLE RUNWAYS AND TAXIWAYS AT HELIPORTS		
	General	3-1	3-1
	Marking with paint	3-2	3-1
	Runway marking	3-3	3-1
	Taxiway marking requirements	3-4	3-1
	Heliport identification marker requirements	3-5	3-1
CHAPTER	4. MARKING OF OVERRUN AND SHOULDER AREAS AT HELIPORTS		
	General	4-1	4-1
	Overrun areas	4-2	4-1
	Runway-shoulder areas	4-4	4-1
	Taxiway, taxilane, apron, hardstand, and engine run-up shoulder areas ...	4-4	4-1
	Detail requirements	4-5	4-1
CHAPTER	5. MARKING AND LIGHTING OF CLOSED OR HAZARDOUS AREAS ON AIRFIELDS OR HELIPORTS		
	Permanently closed runways and taxiways.....	5-1	5-1
	Temporarily closed runways and taxiways.....	5-2	5-1
	Closed airfields and heliports.....	5-3	5-1
	Hazardous areas.....	5-4	5-1
	Stabilized areas.....	5-5	5-1
	Runway shoulder areas	5-6	5-1
CHAPTER	6. MARKING OF COMPASS SWINGING BASES		
	General	6-1	6-1
	Magnetic effects	6-2	6-1
	Pavement grade.....	6-3	6-1
	Alinement markings	6-4	6-1
	Clearances	6-5	6-1
	Marking with paint	6-6	6-1
	Application of paint.....	6-7	6-1
CHAPTER	7. MARKING OF OBSTRUCTIONS TO AIR NAVIGATION		
	General	7-1	7-1

*This manual supersedes TM 5-823-4, dated January 1977, including all changes.

		Paragraph	Page
	Detail requirements	7-2	7-1
	Lighting of airfields, heliports, and obstructions	7-3	7-1
	Purpose of marking	7-4	7-1
	Omission of standard marking	7-5	7-1
	Colors	7-6	7-1
	Painting	7-7	7-1
	Patterns	7-8	7-2
	Markers	7-9	7-6
	Special markings	7-10	7-6
CHAPTER	8. GROUND RECEIVER CHECKPOINTS		
	Location	8-1	8-1
	Painting	8-2	8-1
APPENDIX	A. REFERENCES		A-1

LIST OF FIGURES

Figure	2-1.	Runway markings.
(2)	2-2.	Precision instrument runway marking.
	2-3.	Visual and nonprecision marking.
	2-4.	Runway numbers and letters.
	2-5.	Marking for displaced thresholds, blast pads and stopways.
(2)	2-6.	Taxiway/runway intersection marking.
	2-7.	Runway shoulder markings.
	2-8.	Holding position markings.
	3-1.	Guidelines for marking runways and taxiways at heliports.
	3-2.	Helipad marking pattern.
	4-1.	Marking of heliport overrun and shoulder area.
	4-2.	Marking of shoulders for heliport parking and maintenance aprons and taxiways.
	5-1.	Closed runway and taxiway markings.
	6-1.	Army airfield-heliport compass swinging base.
	7-1.	Painting and lighting of chimneys, poles, towers and similar obstructions.
	7-2.	Painting and lighting of water towers, storage tanks and similar obstructions.
	7-3.	Painting and lighting of water towers and similar obstructions.
	7-4.	Painting of single pedestal water tower by teardrop pattern.
	8-1.	Ground receiver checkpoint markings.

CHAPTER 1

GENERAL

1-1. Purpose. Runway and taxiway markings are essential for the safe and efficient use of airfields and heliports, and their effectiveness is dependent upon proper markings and maintenance to maintain an acceptable level of conspicuity. This manual provides criteria for marking of Army airfields, heliports, and obstructions to air navigation at Army installations within the United States. For marking of Army airfields, heliports, and obstructions to air navigation located in foreign countries, this manual will serve as the basic reference consistent with host country criteria.

1-2. Scope. The criteria contained herein is applicable to all new construction and alteration to existing facilities. Existing facilities will not be re-marked for the sole purpose of compliance with the criteria contained herein, but will conform to the prescribed criteria when remarked for scheduled maintenance or repair. Those facilities requiring higher standards because of special functions, mission, structural requirement, or importance of strategic value, are not covered in this manual. Criteria for these and further exceptions are normally contained in the design directive.

1-3. Exceptions. Exceptions to criteria prescribed and defined herein will not be made without prior approval of HQDA (DAEN-ECEG) WASH DC 20314-1000.

1-4. Definitions. The following definitions apply to terms used in this manual.

a. Airfield. A facility designed and used for the express purpose of operation, maintenance

and basing of either or both, fixed and rotarywing aircraft.

b. Heliport. A facility designed and used for the express purpose of operation, maintenance and basing of rotary-wing aircraft only.

c. Helipad. A facility designed and used for the express purpose of operation of rotary-wing aircraft.

d. Visual runway. A runway having no straight-in instrument approach procedure and intended solely for the operation of aircraft using visual approach procedure.

e. Nonprecision instrument runway. A runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance for which a straightin nonprecision approach procedure has been approved.

f. Precision instrument runway. A runway having an existing instrument approach procedure utilizing a precision instrument landing system.

g. Runway threshold. The designated beginning of the runway that is available and suitable for the landing of aircraft.

h. Displaced threshold. A threshold that is located at a point on the runway other than the beginning of the full strength pavement and the paved area between the beginning of the full strength pavement and the displaced threshold is used for takeoff or rollout of aircraft.

i. Relocated threshold. A threshold that is located at a point on the runway other than the beginning of the full strength pavement and the paved area between the former threshold and the relocated threshold is no longer used for landing or takeoff of aircraft.